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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/281,813	03/31/1999	STEPHEN PALM	P17243	7668

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EXAMINER
NGUYEN, DUNG X

ART UNIT	PAPER NUMBER
2631	24

DATE MAILED: 04/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/281,813	PALM, STEPHEN	
	Examiner	Art Unit	
	Dung X Nguyen	2631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 March 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2, 4, 5, 9 and 10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2, 4, 5, 9 and 10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *23, 24* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Response to Arguments

1. Applicant's arguments, see paper # 25, filed March 17, 2003, have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Goodson et al. (US patent # 5,715,277), submitted by applicant.

According to a feature of applicant's arguments, the carriers issued by the initiating communication device include digital information. Gatherer et al. discloses carriers exchanging between initiating communication device and a responding device (column 17, line 24 to column 19, line 31). The transmitted carriers include multiple tones (column 18, line 63 through column 19, line 3). However, Goodson et al. discloses the steps of translating the tones to symbol rate (digital information) (column 3, lines 63 – 56 and column 4, lines 46 – 63). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Gatherer et al. and Dobson et al. to provide these above functions for improving the efficient processing.

Based on above rationale, it is believed that the claimed limitations are met. Therefore, the following action is the FINAL ACTION necessitated by the applicant's amendment.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> *(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.*

3. **Claims 2, 4, 5, 9, and 10 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Gatherer et al. (U.S. Patent No. 6,044,107), and further in view of Goodson et al. (US patent # 5,715,277).

Regarding claim 2, Gatherer et al. discloses that a DSL system can also be implemented with multiple carriers using the DMT line code (column 17, lines 24 – 29 and column 18, lines 24 – 25), comprising:

- Transmitting a negotiation protocol (carriers including first information representing different communication device capabilities) from calling modem, which has the capability of implementing either CAP or DMT line codes (column 18, line 50 to column 19, line 6);
- Receiving a negotiation protocol (second information representing different communication device capabilities) from answering modem, which has the capability of implementing either CAP or DMT line codes (column 18, line 5 to column 19, line 31);
- Selecting an appropriate communication device (based on usage tariff), in accordance with the responding communication device, to establish a communication link (column 18, line 63 to column 19, line 6), wherein the transmitted carriers contain data related to a usable allocation (column 3, lines 10 – 17).

Gatherer et al. differs from the instant claimed invention that it does not state the carriers including digital information. Gatherer et al. discloses carriers exchanging between initiating communication device and a responding device (column 17, line 24 to column 19, line 31). The transmitted carriers include multiple tones (column 18, line 63 through column 19, line 3). However, Goodson et al. discloses the steps of translating the tones to symbol rate (digital information) (column 3, lines 63 – 56 and column 4, lines 46 – 63). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Gatherer et al. and Dobson et al. to provide these above functions for improving the efficient processing.

Regarding claim 4, Gatherer et al. discloses that a DSL system can also be implemented with multiple carriers using the DMT line code (column 18, lines 24 – 25), comprising:

- Transmitting a negotiation protocol (carriers including first information representing different communication device capabilities) from calling modem, which has the capability of implementing either CAP or DMT line codes (column 18, line 50 to column 19, line 6);
- Receiving a negotiation protocol (second information representing different communication device capabilities) from answering modem, which has the capability of implementing either CAP or DMT line codes (column 18, line 5 to column 19, line 31);
- Selecting an appropriate communication device (based on usage tariff), in accordance with the responding communication device, to establish a communication link (column 18, line 63 to column 19, line 6), wherein the negotiation data transmitting section transmits the carriers in accordance with neighboring receiving systems (column 8, lines 12 – 28 and column 19, lines 38 – 45).

Gatherer et al. differs from the instant claimed invention that it does not state the carriers including digital information. Gatherer et al. discloses carriers exchanging between initiating communication device and a responding device (column 17, line 24 to column 19, line 31). The transmitted carriers include multiple tones (column 18, line 63 through column 19, line 3). However, Goodson et al. discloses the steps of translating the tones to symbol rate (digital information bits) (column 3, lines 63 – 56 and column 4, lines 46 – 63). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Gatherer et al. and Dobson et al. to provide these above functions for improving the efficient processing.

Regarding claim 5, Gatherer et al. further discloses that the transmitting of transmission characteristics of the carriers comprises re-configuring the carriers during a transmission operation in order to minimize interference with the neighboring receiving stations (column 19, lines 38 – 45, and column 8, lines 12 – 28).

Regarding claim 9, Gatherer et al. discloses that a DSL system can also be implemented with multiple carriers using the DMT line code (column 18, lines 24 – 25), comprising:

- Transmitting carriers according to a predefined time sequence to a responding communication device (column 18, line 50 to column 19, line 22);
- Receiving carriers according to a predefined time sequence from a responding communication device (column 18, line 50 to column 19, line 22);
- Selecting an appropriate communication device (based on usage tariff), in accordance with the responding communication device, to establish a communication link (column 18, line 63 to column 19, line 6), wherein the negotiation data transmitting section transmits the carriers in accordance with neighboring receiving systems (column 8, lines 12 – 28 and column 19, lines 38 - 45).

Gatherer et al. differs from the instant claimed invention that it does not state the carriers including digital information. Gatherer et al. discloses carriers exchanging between initiating communication device and a responding device (column 17, line 24 to column 19, line 31). The transmitted carriers include multiple tones (column 18, line 63 through column 19, line 3). However, Goodson et al. discloses the steps of translating the tones to symbol rate (digital information bits) (column 3, lines 63 – 56 and column 4, lines 46 – 63). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Gatherer et al. and Dobson et al. to provide these above functions for improving the efficient processing.

Regarding claim 10, Gatherer et al. also discloses that the transmitting of transmission characteristics of the carriers comprises re-configuring the carriers during a transmission operation in order to minimize interference (line condition change) with the neighboring receiving stations (column 19, lines 38 – 45 and column 8, lines 12 – 28).

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung X. Nguyen whose telephone number is (703) 305-4892. The examiner can normally be reached on Monday through Friday from 9:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Chi Pham can be reached on (703) 305-4378. The fax phone numbers for this group is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305- 3800.

DXN
April 3, 2003

TESFALDET BOCURE
PRIMARY EXAMINER